WHAT IS CLAIMED IS:

- 1. A monitoring device adapted to be connected to a storage area network for monitoring the network, comprising:
 - a network interface adapted to be connected to the storage area network;
- a controller connected to the network interface for controlling the functions of the monitoring device; and
- a GPS receiver connected to the controller for supplying a synchronized timing signal to the controller.
- 2. The monitoring device of claim 1, wherein the controller is a field programmable gate array.
- 3. The monitoring device of claim 3, further comprising:
 - a serializer/deserializer connected to the network interface;
 - a serial router connected to the serializer/deserializer and to the controller;
 - a peripheral bus interface adapted to be connected to a peripheral bus;
 - a FIFO connected to the controller and to the peripheral bus interface; and
- a timer connected to the controller and receiving the timing signals supplied by the GPS receiver.
- 4. The monitoring device of claim 3, wherein the network interface is a Fibre Channel interface for connecting to a Fibre Channel, and wherein the peripheral bus interface is a peripheral component interconnect (PCI) interface for connecting to a PCI bus.
- 5. A storage system comprising:
 - a storage area network; and
- a plurality of monitoring devices connected to the network, each monitoring devices including a GPS receiver for supplying a synchronized timing signal to the receiver, and the plurality of monitoring devices sampling data from the network in a synchronized manner.
- 6. A method of monitoring a storage area network, comprising:

sampling information from the storage area network using a plurality of monitoring devices;

receiving GPS timing signals by each monitoring device; and synchronizing the sampling of information by the plurality of monitoring devices using the received GPS timing signals.